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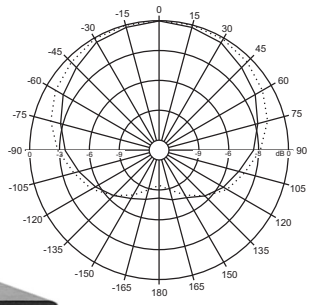
Studio Reference Monitor Loudspeaker
RL903K

with cardioid radiation characteristic in bass range



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The Reference Class - Active Studio-Monitors made by musikelectronic geithain

RL Series
From a compact two-way monitor up to large loudspeaker-systems - we provide you with the best solutions for all kinds of professional use. The RL series' studio-monitors are the result of consequent development that needed many years and pursued only one aim: the highest degree of precise sound without any coloration regardless of genres. Hearing and measuring are the basis of our work. We build on profound musical comprehension and the knowledge of unalterable physical laws - not on magic tricks, new fashioned ideas nor marketing-strategies.

You have to do it you yourself!
We produce loudspeaker in accordance to our conviction. That is why we develop and construct all monitors ourselves - from A to Z, from the electronics of the amplifier to the voice coil of the transducer. A product, which components all come from our own manufacturing, has noticeable advantages for you as a professional customer. We are independent of third parties products and build our components just the way we require them - this proceeding can't be beaten in quality by mass-production. This strategy also leads to high continuity and a fixed (stable) value of our product range as well as it ensures that replacement parts will be available for long-term. We believe that this is the only way to create a product which is worth your investment and satisfies your professional needs for many years.

Active and Coaxial
Active multi-way technique with internal crossovers, power amplifier, and our special coaxial arranged transducers are the basis of all professional monitors of our RL series. As a result of this technology our speaker reveal a great depth and precise focus and low harmonic distortion. We used physiological effects of hearing to optimize the power concentration and directivity of sound. This degree of accuracy of sound is unmatched by any other.

Made from one piece
All RL-loudspeaker from the compact RL 906 to the RL 900 A are tonal compatible with each other. Therefore it is your choice where you prefer to work; even within the same production you are independent from the studio environment. No matter if you work in a broadcast van or in a studio - the loudspeaker will not differ in sound, but only in their low-frequency cutoff and the maximum acoustic output.

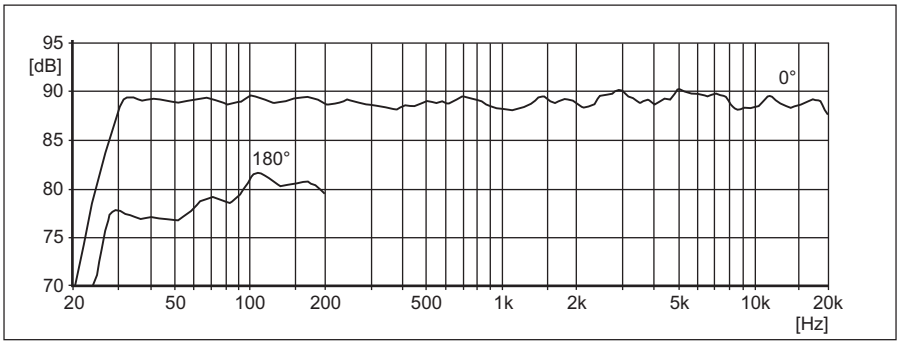
Active Studio Loudspeaker RL 903K

RL 903K is a main studio control room monitor with cardioid radiation characteristic from 35 Hz through 100 Hz for universal application. Main operational areas are audio, video and motion picture studios. By the cardiod characteristic those reflections caused by the wall behind the speakers are minimized. To enhance the low-frequency range we combined the coaxial arranged high- and mid-frequency driver unit with a powerful long-voice coil bass driver unit. Its coaxial arranged transducers ensure a sound impression with a high degree of homogeneity to a point source. We spend much effort in developing constructive ways to ensure a low degree of non-linear distortion. To keep short-term reflections small and achieve a high fidelity of sound we used a special arrangement for the high- and mid-frequency drivers and also designed the front side of the speaker asymmetrical.Although the cabinets dimensions a very compact, the system obtains a low-frequency cut-off at 35 Hz.

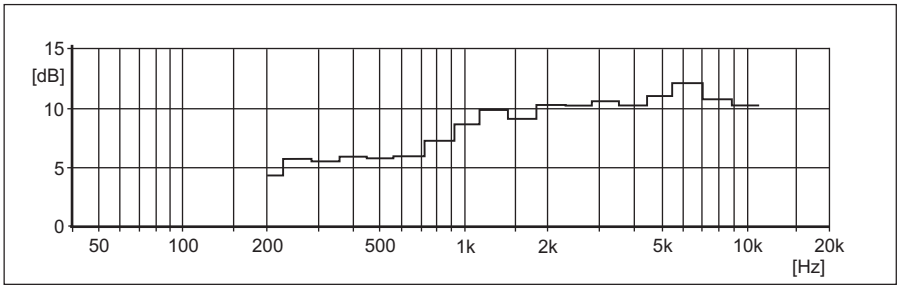
The three-way MOSFET-amplifier with active crossover is situated at the back of the cabinet and is easily accessible for maintenance. An intermittent LED indicates sound pressure levels within the overload margin of 3 dB and warns of clipping. Beyond this limit the output level of the high- and mid-frequency drivers get damped by 20 dB to protect the speaker's components.
The coaxial arranged high- and mid-frequency driver unit can be revolved by 90 degrees, that way the speaker can be installed either in vertical or horizontal position. To compensate their placement the speaker features two controllers to continuously adjust the low-frequency response.
There are various stands available as optional extras, which fit in the integrated appliance. We also offer this monitor magnetically shielded.

Specifications

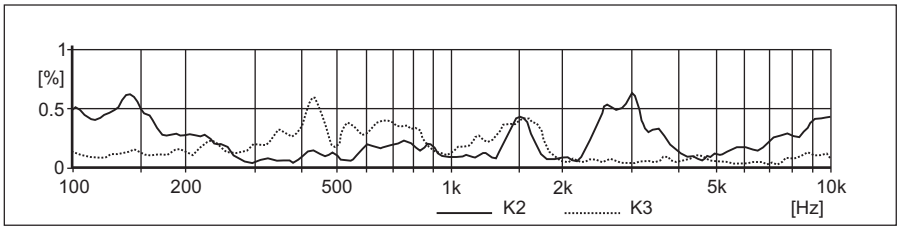
General	active three-way reference monitor for use in large audio-,video- and film production studios and in mobile broadcast vans
Maximum SPL from 100 Hz ... 6 kHz	113 dB / r =1m
Bandwidth	35 Hz...20 kHz ± 3 dB
Calibration: Acoustic output level / P_E = -14 dBu	89 dB / r =1m
Directivity index from 200 Hz...10kHz	increasing from 4 to 12 dB
Inherent noise sound level	< 7dB(A) / r =1m
Total harmonic distortion / measured at 96 dB, r =1m, from 80 Hz...10 kHz	<-45 dB
Nominal input level	+6 dBu adjustable
Input impedance	> 10 kOhm / symmetrically
Nominal output power of the MOSFET-amplifier	
LF	180 Watt / 4 Ohm
MF	100 Watt / 4 Ohm
HF	100 Watt / 4 Ohm
Electronic crossover frequencies	250 Hz and 2.6 kHz
Operation and clipping indicator	LED on front side
Input connector	XLR 3F
Loudspeaker systems	
Woofer	200 mm cone
Mid-range unit	160 mm cone
Tweeter	25 mm dome
Power requirements	Europe 230 Volt (±10%), AC, 50 Hz U.S.A. & Canada 127 Volt, AC, 60 Hz Japan 100 Volt, AC, 60 Hz
Power consumption	max. 300 Watt at full load
Temperature requirements	
for use	+15°C to +35°C
for storage	-25°C to +45°C
Humidity	45 - 75 %
Dimensions (H x W x D)[mm]	480 x 285 x 293
Weight	28 kg
Design of the Cabinet	MDF wood, black veneer, different colors optional
Magnetic shield	optional



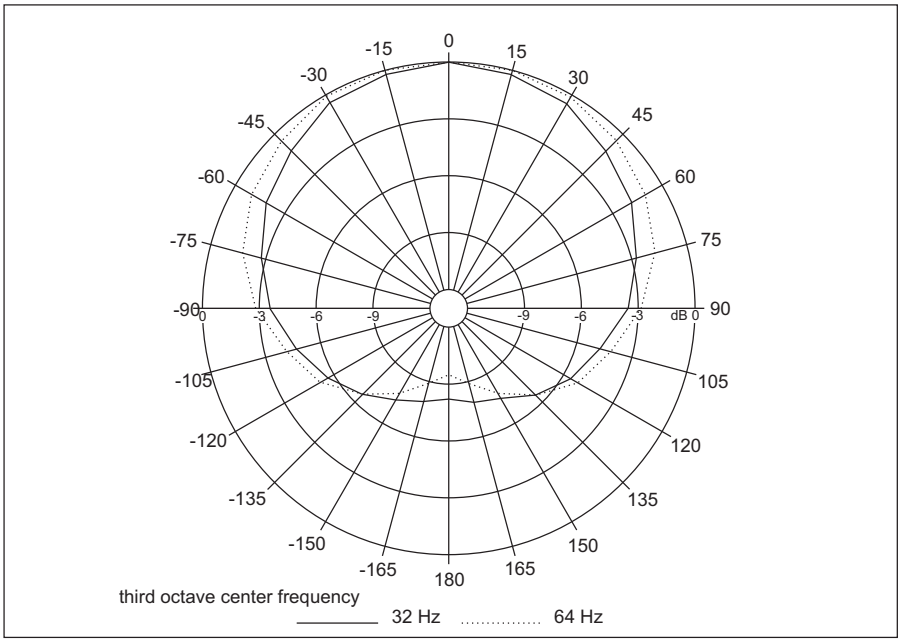
Free field frequency response



Directivity index



Total harmonic distortion P_A= 96 dB



directional characteristic

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